

MEMO

DATE: January 3, 2008

TO: Energy and Environment Committee

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SUBJECT: Update on the Global Warming Solutions Act of 2006 (AB 32)

BACKGROUND:

The intent of this information item is to provide the Energy and Environment Committee with an update of AB 32 implementation. On September 27, 2006, Governor Arnold Schwarzenegger signed AB 32 (Global Warming Solutions Act) into law, requiring that the California Air Resources Board (CARB) reduce greenhouse gas emissions (GHG) by 25 percent by 2020. Staff has invited Richard Varenchik from CARB to present an update. This memo highlights three key activity areas: the adoption of discrete early actions, setting the 1990 GHG emission level to be reached by 2020, and development of the Scoping Plan to achieve GHG reductions.

Discrete Early Actions

CARB initially adopted the following three “discrete early action measures” on June 21, 2007 that are intended to reduce GHG emissions:

- A low-carbon fuel standard which reduces carbon intensity in California fuels
- Reduction of refrigerant losses from motor vehicle air conditioning system maintenance which restricts the sale of “do-it-yourself” automotive refrigerants
- Increased methane capture from landfills which requires broader use of state-of-the-art methane capture technologies

On October 25, 2007, CARB adopted two additional “discrete early actions” and reclassified four early actions as discrete early actions, for a total of nine discrete early actions. The two new discrete early actions are:

- Standards to Reduce High GWP Consumer Products
- Ban Use of Sulfur Hexafluoride In Non-Electric Sector

The four reclassified discrete early actions are:

- Green Ports (requires docked ships to shut off auxiliary engines by plugging into shoreside electronic power)
- Reducing Perfluorocarbons (PFCs) in the Semiconductor Industry
- Smartway Truck Efficiency (requires existing trucks and trailers to be retrofitted with devices that reduce aerodynamic drag and rolling resistance)
- Tire Inflation Program (requires proper tire inflation as part of overall service)

CARB staff has identified 35 additional early actions measures that are expected to yield significant GHG emission reductions, be cost-effective and technologically feasible. CARB staff will bring these measures back to the Board as full proposals over the next five years.

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1990 GHG Emissions Inventory

CARB staff has spent the past year assembling an inventory of the state's 1990 emissions using a variety of data sources, including inputs related to fuel combustion, industrial processes, and agricultural practices. That figure is 427 million metric tons of carbon dioxide equivalent. (By comparison, 200,000 passenger cars driven for a full year produce about one million tons of carbon dioxide.)

Preliminary estimates indicate that 2020 emission projections could be 600 million tons of carbon dioxide equivalent if no actions are taken to reduce greenhouse gases-the so-called 'business-as-usual' scenario. This means that California must prevent 173 million tons of carbon dioxide equivalent from being emitted by 2020 in order to meet the 1990 level as required by AB32.

The inventory revealed that in 1990 transportation, with 35 percent of the state's total emissions, was the largest single sector, followed by industrial emissions, 24 percent; imported electricity, 14 percent; in-state electricity generation, 11 percent; residential use, 7 percent; agriculture, 5 percent; and commercial uses with 3 percent.

GHG Reduction Scoping Plan

AB 32 outlines a comprehensive, multi-year program to reduce California's GHG emissions. By January 1, 2009 the Board must adopt the Scoping Plan, the main plan for reducing California's GHG emissions. Then the Board has until January 1, 2011 to adopt the Plan's various regulations and other initiatives reducing GHG emissions. These various reduction strategies will start going into effect by January 1, 2012.

CARB staff are currently developing a Scoping Plan to develop programs and measures to address the remaining 107 million tons of carbon dioxide equivalent in order to reach the total of 173 million tons by 2020. That plan will be submitted to the Board in November 2008.

FISCAL IMPACT:

Funds for this item are included in the FY 07-08 budget under WBS 08-020.SCGS1.

Reviewed by:



Division Manager

Reviewed by:



Department Director

Reviewed by:



Chief Financial Officer